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| EXAMINER |
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2687

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|--|---|---|--|
| <p align="center">Office Action Summary</p> | <p>Application No.</p> <p>09/975,287</p> | <p>Applicant(s)</p> <p>NELSON ET AL.</p> | |
| | <p>Examiner</p> <p>Thai N. Vu</p> | <p>Art Unit</p> <p>2687</p> | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 9, 11-15, 18-40, 47-52 and 56-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-5, 9, 11-15, 18-40, 47-48, 50-52 and 56-66 is/are rejected.
- 7) ☒ Claim(s) 3 and 49 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____.</p> |
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DETAILED ACTION

Response to Amendment

1. Applicant's arguments with respect to claims 1-5, 9, 11-15, 18-40, 47-52, and 56-66 have been considered but are moot in view of the new ground(s) of rejection.

Double Patenting

2. Claim 21 and 60 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,850,782. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of U.S. Patent No. 6,850,782 is broader in scope.

3. Claims 31-32 and 39 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 5 of U.S. Patent No. 6,850,782. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 31 of the instant application and claim 5 of U.S. Patent No. 6,850,782 disclose the same apparatus.

Claim Objections

4. Claims 12-13, 28-29, and 37-38 are objected to because of the following informalities: where possible, claims are to be complete in themselves. Incorporation

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by reference to a specific figure or table "is permitted only in exceptional circumstances where there is no practical way to define the invention in words and where it is more concise to incorporate by reference than duplicating a drawing or table into the claim. Incorporation by reference is a necessity doctrine, not for applicant's convenience. " Ex parte Fressola, 27 USPQ 2d 1608, 1609 (Bd. Pat. App. & Inter. 1993) (citations omitted). Reference characters corresponding to elements recited in the detailed description and the drawings may be used in conjunction with the recitation of the same element or group of elements in the claims (see MPEP § 2173.05(s) and § 608.01(m)). Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-2, 9, 11-15, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell et al. (U.S. Patent #: 5,966,671; hereinafter Mitchell) in view of Anderson (U.S. Patent #: 5,721,783; hereinafter Anderson).

Regarding claim 1, Mitchell teaches a wireless mobile phone comprising:

a body casing having a plurality of surfaces (FIG. 1);

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an input keypad disposed on said a first surface of said body casing to facilitate entry of alphanumeric data (FIG. 2, keypad 202; column 2, lines 55-65);

at least a first button disposed on a second surface of said body casing (FIG. 2, buttons 124, 128, 126).

It should be noticed that Mitchell fails to clearly teach the feature of the complementary logic in support of the at least first button to facilitate entry of alphanumeric data or phrases having one or more words in encoded representations of a variable length encoding scheme using said at least first button, the variable length encoding scheme having a plurality of codes of various code length including a first and a second code having a first and a second code length representing a phrase and a vowel respectively, and the first code length being shorter than the second code length. However, Anderson teaches such limitations in FIG. 9, Digital Signal Processor 948 providing digital logic support for Morse Code Keys 956; and column 20, line 65-column 21, line 2 (Morse code is used for coding messages having phrases comprising words, vowels and numbers having different lengths. In International Morse coding scheme, number of coding elements used for the word "te" is lower than vowel "o"), for the purpose of performing data entry on a mobile device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of the complementary logic in support of the at least first button to facilitate entry of alphanumeric data or phrases having one or more words in encoded representations of a variable length encoding scheme using said at least first button, the variable length encoding scheme

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having a plurality of codes of various code length including a first and a second code having a first and a second code length representing a phrase and a vowel respectively, and the first code length being shorter than the second code length as taught by Anderson, in view of Mitchell, in order facilitate the process of entering messages using a mobile device.

Regarding claim 2, Anderson further teaches limitations of the claim in column 20, line 65-column 21, line 2.

Regarding claim 9, Anderson further teaches limitations of the claim in column 20, line 65-column 21, line 2 (system supports Morse code and any other code therefore supports user specification of one or more words in length).

Regarding claim 11, Anderson further teaches limitations of the claim in 20, line 65-column 21, line 25.

Regarding claim 12, Anderson further teaches limitations of the claim in 20, line 65-column 21, line 25 (Anderson teaches code format used could be Morse or any other code. It is obvious that users can use any code to define letters suitable for his/her needs).

Regarding claim 13, Anderson further teaches limitations of the claim in 20, line 65-column 21, line 25 (Anderson teaches code format used could be Morse or any other code. It is obvious that users can use any code to define letters suitable for his/her needs).

Regarding claim 14, Anderson further teaches limitations of the claim in FIG. 9, Digital Signal Processor 948 and Morse Code Keys 956 and column 21, lines 25-30 (It

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is inherently understood that, data, when converted into text messages by a micro-processor are processed as bytes, each byte contains fixed 8 binary bits).

Regarding claim 15, Anderson further teaches limitations of the claim in column 20, line 65-column 21, line 25.

Regarding claim 18, Mitchell teaches limitations of the claim in FIG. 2.

Regarding claim 19, Mitchell teaches limitations of the claim in FIG. 2.

Regarding claim 20, Anderson teaches limitations of the claim in FIG. 7.

7. Claims 4, 5, 21-30, 47-48, 50, 60-61, 64-65, and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell in view of Anderson as applied to claim 1 above and further in view of Le Pechon (U.S. Patent #: 4,630,208; hereinafter Le Pechon) and Siefert (U.S. Patent: 6,732,358; hereinafter "Siefert").

Regarding claim 4, Mitchell further teaches the feature of a transceiver to send and receive signals (FIG. 5, transmitter 523 and receiver 527).

an adapter interface to removably attach a device capable of vibrating to said mobile phone (column 3, lines 27-30 and FIG. 4, port 402 for use with a headphone. A headphone is a device capable of vibrating at audible frequencies), and

It should be noticed that Mitchell fails to teach the feature of vibrationally outputting alphanumeric data received through said transceiver using said removably attached capable of vibrating device. However, Le Pechon teaches such limitations of the claim in FIG. 1 and column 4, lines 19-24 for the purpose of receiving Morse code signal.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of vibrationally outputting alphanumeric data received through said transceiver using said removably attached capable of vibrating device, as taught by Le Pechon, into view of Mitchell and Anderson, in order to be used by visual impaired users.

It should be further noticed that, the combination, fails to teach the feature of vibrationally outputting data for touch comprehension. However, Siefert teaches such limitations in column 13, lines 7-12.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of vibrationally outputting data for touch comprehension, as taught by Siefert, in view of Anderson, Mitchell and Le Pechon for use by visually and audibly impaired users.

Regarding claim 5, Anderson further teaches limitations of the claim in column 20, line 65-column 21, line 2.

Regarding claim 21, Mitchell teaches: a wireless mobile phone comprising:
a transceiver to send and receive signals (FIG. 5, transmitter 523 and receiver 527);

an adapter interface to removably attach a device capable of vibrating to said mobile phone (FIG. 4, port 402; column 3, lines 27-30 for use with a headphone. A headphone is a device capable of vibrating at audible frequencies); and complementary logic in support to said transceiver (FIG.5, microprocessor 503 providing control logic for the transceiver 523, 527)

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It should be noticed that Mitchell fails to teach the feature of adaptor interface vibrationally outputting alphanumeric data received through said transceiver using said removably attached capable of vibrating device. However, Le Pechon teaches such limitations of the claim in FIG. 1 and column 4, lines 19-24 (headset producing vibration, i.e. sound wave) for the purpose of receiving Morse code signal.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of adaptor interface vibrationally outputting alphanumeric data received through said transceiver using said removably attached capable of vibrating device, as taught by Le Pechon, into view of Mitchell, in order to be used by visual impaired users.

It should be further noticed that, Mitchell and Le Pechon, in combination, fail to teach the feature of vibrational manifestation for touch comprehension. However, Siefert teaches such limitations in column 13, lines 7-12.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of vibrational manifestation for touch comprehension, as taught by Siefert, in view of Mitchell and Le Pechon for use by visually and audibly impaired users.

Regarding claim 22, Mitchell further teaches limitations of the claim in FIG. 5, display 204.

Regarding claim 23, Le Pechon further teaches limitations of the claim in column 4, lines 19-24.

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Regarding claim 24 Mitchell and Le Pechon, in combination, teaches all subject matter as claimed above, except for the feature of encoded representations being encoded representations of a custom variable length encoding scheme. However, Anderson teaches such limitations in column 20, line 65-column 21, line 2 for the purpose of providing alternate ways of entering data on a mobile device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of encoded representations being encoded representations of a custom variable length encoding scheme, as taught by Anderson, into view of Mitchell and Le Pechon, in order to provide a suitable customized way for the user to enter messages using the mobile device.

Regarding claim 25, Anderson further teaches limitations of the claim in column 20, line 65-column 21, line 2 (e.g., word "te" is shorter than vowel "o" in international Morse code).

Regarding claim 26, Anderson further teaches limitations of the claim in column 20, line 65-column 21, line 2 ("any other code" includes user specifiable codes).

Regarding claim 27, Anderson further teaches limitations of the claim in 20, line 65-column 21, line 25.

Regarding claim 28, Anderson further teaches limitations of the claim in 20, line 65-column 21, line 25 (Anderson teaches code format used could be Morse or any other code. It is obvious that users can use any code to define letters suitable for his/her needs).

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Regarding claim 29, Anderson further teaches limitations of the claim in 20, line 65-column 21, line 25 (Anderson teaches code format used could be Morse or any other code. It is obvious that users can use any code to define letters suitable for his/her needs).

Regarding claim 30, Anderson further teaches limitations of the claim in FIG. 9, Digital Signal Processor 948 and Morse Code Keys 956 and column 21, lines 25-30 (It is inherently understood that, data, when converted into text messages by a micro-processor are processed as bytes, each byte contains fixed 8 binary bits).

Regarding claim 47, Anderson teaches, in a wireless mobile phone, a method comprising:

receiving encoded representations of a variable length encoding scheme of alphanumeric data and phrases entered using at least a first button, said variable length encoding scheme comprising a plurality of codes of various code lengths including a first and a second code having a first and second code length representing a phrase of one or more words, and a vowel, with the first code length being shorter than the second code length (column 20, line 65-column 21, line 2 – Morse code is used for coding messages having phrases comprising words, vowels and numbers having different lengths. In international Morse code scheme, number of coding elements used for the word “te” is lower than vowel “o”).

said mobile phone also having an input keypad disposed on a front surface to facilitate entry of alphanumeric data (FIG. 7).

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in response, electrically generating signals corresponding to fixed length digital representations of said alphanumeric data or phrases entered through entry of their variable length encoded representations of said variable length encoding scheme using said at least a first button (FIG. 9, Digital Signal Processor 948 and Morse Code Keys 956 and column 21, lines 25-30. It is inherently understood that, data, when converted into text messages by a micro-processor are processed as bytes, each byte contains fixed 8 binary bits).

It should be noticed that Anderson fail to teach the feature of at least a first button disposed on top or side of the surface of the mobile phone. However Mitchell teaches such limitations in FIG. 2, button 124,126,128, for the purpose of controlling the cursor.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of at least a first button disposed on top or side of the surface of the mobile phone, as taught by Mitchell, in view of Anderson, in order to facilitate process of operating the mobile phone.

Regarding claim 48, Anderson further teaches limitation of the claim in (column 20, line 65-column 21, line 2).

Regarding claim 50, Anderson and Mitchell, teaches all subject matter as claimed above and Mitchell further teaches the step of an adapter interface to removably attach a capable of vibrating device to said mobile phone (lines 27-30; FIG. 4, port 402 column 3, for use with an headphone. A headphone is a device capable of vibrating at audible frequencies),

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It should be noticed that, Anderson and Mitchell fails to teach the step of vibrationally outputting the variable length encoded representations of the alphanumeric data received through a transceiver of said mobile phone using said removably attached capable of vibrating device. However, Le Pechon teaches such limitations in FIG. 1 and column 4, lines 19-24 for the purpose of receiving Morse code signal.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the step of vibrationally outputting the variable length encoded representations of the alphanumeric data received through a transceiver of said mobile phone using said removably attached capable of vibrating device, as taught by Le Pechon, into view of Mitchell and Anderson, in order to be used by visual impaired users.

It should be further noticed that, Anderson Mitchell and Le Pechon, in combination, fails to teach the feature of vibrationally outputting encoded presentations for touch comprehension. However, Siefert teaches such limitations in column 13, lines 7-12.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of outputting encoded presentations for touch comprehension, as taught by Siefert, in view of Mitchell and Le Pechon for use by visually and audibly impaired users.

Regarding claim 60, Mitchell teaches a wireless mobile phone comprising:
a transceiver to send and receive signals (Fig. 9, receiver 924 and transmitter 916);

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an adapter interface to removably attach a device capable of vibrating to said mobile phone (FIG. 49, interface 950; column 23, lines 14-18 - speaker is a device capable of vibrating at audible frequencies).

means coupled to said transceiver and said adapter interface to output data received via said transceiver using the removably attached capable of vibrating device (FIG. 49, interface 950; column 23, lines 14-18 - speaker is a device capable of vibrating at audible frequencies).

It should be noticed that, Mitchell fails to teach the feature of vibrationally outputting alphanumeric data through vibrational manifestation code representations of the received alphanumeric data for touch comprehension. However, Siefert teaches such limitations in column 13, lines 7-12.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of vibrationally outputting alphanumeric data through vibrational manifestation code representations of the received alphanumeric data for touch comprehension, as taught by Siefert, in view Anderson, for use by visually and audibly impaired users.

Regarding claim 61, Anderson further teaches such limitations in column 20, line 65-column 21, line 29.

Regarding claim 64, Anderson teaches, in a wireless mobile phone, a method comprising:

receiving code representations of alphanumeric data or phrases having one or more words entered using at least a first button (column 20, line 65-column 21, line 2),

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said mobile phone also having an input keypad disposed on a front surface to facilitate entry of alphanumeric data (FIG. 7; FIG. 2, keypad 202; column 2, lines 55-65), variable length coding scheme including a first and second code representation having first and a second code length representing a phrase and a vowel, respectively, and the first code length being shorter than the second length (column 20, line 65-column 21, line 2 – Morse code is used for coding messages having phrases comprising words, vowels and numbers having different lengths. In international Morse code scheme, number of coding elements used for the word “te” is lower than vowel “o”).

in response, electrically generating signals corresponding to fixed length digital representations of said alphanumeric data or phrases entered through entry of their variable length encoded representations using said at least a first button (FIG. 9, Digital Signal Processor 948 and Morse Code Keys 956 and column 21, lines 25-30. It is inherently understood that, data, when converted into text messages by a micro-processor are processed as bytes, each byte contains fixed 8 binary bits).

It should be noticed that Anderson fail to teach the feature of at least a first button disposed on top or side of the surface of the mobile phone. However Mitchell teaches such limitations in FIG. 2, button 124,126,128.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of at least a first button disposed on top or side of the surface of the mobile phone, as taught by Mitchell, in view of Anderson, in order to facilitate process of operating the mobile phone.

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Regarding claim 65, Anderson further teaches limitations of the claim in column 20, line 65-column 21, line 29.

Regarding claim 66, Anderson and Mitchell, in combination, teaches all subject matter as claimed above, and Mitchell further teaches an adapter interface to removably attach a capable of vibrating device to said mobile phone (FIG. 4, port 402; column 3, lines 27-30 for use with a headphone. A headphone is a device capable of vibrating at audible frequencies).

It should be noticed that the combination fails to teach the feature of device vibrationally outputting alphanumeric data received through the transceiver using said removably attached capable of vibrating device. However, Le Pechon teaches such limitations of the claim in FIG. 1 and column 4, lines 19-24 (headset producing vibration, i.e. sound wave) for the purpose of receiving Morse code signal.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of adaptor interface vibrationally outputting alphanumeric data received through said transceiver using said removably attached capable of vibrating device, as taught by Le Pechon, into view of Mitchell, in order to be used by visual impaired users.

It should be further noticed that, the combination, fails to teach the feature of vibrationally outputting data for touch comprehension. However, Siefert teaches such limitations in column 13, lines 7-12.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of vibrationally

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outputting data for touch comprehension, as taught by Siefert, in view of Anderson, Mitchell and Le Pechon for use by visually and audibly impaired users.

8. Claims 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keshavachar (U.S. Patent #: 6,631,274; hereinafter Keshavachar) in view of Anderson.

Regarding claim 51, Keshavachar teaches a method of communication comprising: employing a wireless mobile phone to place a call to a callee and communicate verbally with the callee using the wireless mobile phone (column 4, lines 6-7); and

at selected moments of desired increased privacy during the call, communicate non-verbally with the callee, and sending the entered text messages to the callee (column 4, lines 6-20. Keshavachar teaches a communication system that allows mobile users to transmit text messages (SMS) while in voice mode. It is inherently understood that users would choose moments when higher level of privacy is desired to communicate using messages instead of voice).

It should be noticed that Keshavachar fails to clearly teach the feature of entering text messages to be transmitted to the callee in an encoded representation form in accordance with a variable length encoding scheme, using at least a first button disposed on a top or side surface of the wireless mobile phone, said variable length encoding scheme comprising a plurality of codes of various code lengths including a first and a second code having a first and a second code length representing a phrase of one or more words, and a vowel, with the first code length being shorter than the

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second code length. However Anderson teaches such limitations in column 20, line 64- column 21, line 2 and FIG. 7, button 72 (Morse code is used for coding messages having phrases comprising words, vowels and numbers having different lengths. In international Morse code scheme, number of coding elements used for the word "te" is lower than vowel "o"), for a purpose of performing data entry

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature entering text messages to be transmitted to the callee in an encoded representation form in accordance with a variable length encoding scheme, using at least a first button disposed on a top or side surface of the wireless mobile phone, as taught by Anderson, in view of Keshavachar, in order facilitate the process of entering messages using a mobile device.

Regarding claim 52, Anderson further teaches limitations of the claim in FIG. 9, Digital Signal Processor 948 and Morse Code Keys 956 and column 21, lines 25-30 (It is inherently understood that, data, when converted into text messages by a micro-processor are processed as bytes, each byte contains fixed 8 binary bits).

9. Claims 56-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell in view of Anderson and Keshavachar

Regarding claim 56, Mitchell teaches a wireless mobile phone comprising:
a transceiver to send and receive signals (Fig. 5, receiver 527 and transmitter 523);

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a body casing having a front surface and side surface (FIG. 1);

an input keypad disposed on said a front surface of said body casing to facilitate entry of alphanumeric data (FIG. 2, keypad 202; column 2, lines 55-65);

a first button disposed on said side surface of said body casing (FIG. 2, buttons 124,128,126);

a second button disposed on said side surface of said body casing adjacent to the said first button (FIG. 2, buttons 124,128,126).

It should be noticed that, Mitchell fails to teach the feature of

means coupled to first and second buttons and to the transceiver to facilitate entry of alphanumeric data or phrase with one or more words via corresponding code representations of a variable length coding scheme, using said first and second buttons, the variable length coding scheme including a first and a second code representation having a first and second code length representing a phrase and a vowel, respectively, and the first code length being shorter than the second length.

However, Anderson teaches such limitations in FIG. 9, Digital Signal Processor 948 providing digital logic support for Morse Code Keys 956; and column 20, line 65-column 21, line 2 (Morse code is used for coding messages having phrases comprising words, vowels and numbers having different lengths. In International Morse coding scheme, number of coding elements used for the word "te" is lower than vowel "o"),

It should be noticed that, Mitchell and Anderson, in combination, fails to teach the feature of transmission of said alphanumeric data using said transceiver. However, Keshavachar teaches such limitations in column 4, lines 6-20.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of feature of transmission of said alphanumeric data using said transceiver, as taught by Keshavachar, in view of Mitchell and Anderson in for use by verbally impaired users.

Regarding claim 57, Anderson further teaches limitations of the claim in (column 20, line 65-column 21, line 30).

10. Claims 58-59, and 62-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell in view of Anderson and Keshavachar as applied to claim 56 above and further in view of Siefert

Regarding claim 58, Mitchell, Anderson, and Keshavachar, teaches all subject matter as claimed above, and Mitchell further teaches an adapter interface to removably attach a device capable of vibrating to said mobile phone (FIG. 4, port 402; column 3, lines 27-30 for use with a headphone. A headphone is a device capable of vibrating at audible frequencies).

It should be noticed that Mitchell fails to teach the feature of device vibrationally outputting alphanumeric data received through the transceiver using said removably attached capable of vibrating device. However, Le Pechon teaches such limitations of the claim in FIG. 1 and column 4, lines 19-24 (headset producing vibration, i.e. sound wave) for the purpose of receiving Morse code signal.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of adaptor interface

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vibrationally outputting alphanumeric data received through said transceiver using said removably attached capable of vibrating device, as taught by Le Pechon, into view of Mitchell, in order to be used by visual impaired users.

It should be further noticed that, the combination, fails to teach the feature of vibrationally outputting data for touch comprehension. However, Siefert teaches such limitations in column 13, lines 7-12.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of vibrationally outputting data for touch comprehension, as taught by Siefert, in view of Mitchell Anderson, Keshavachar and Le Pechon for use by visually and audibly impaired users.

Regarding claim 59, Siefert further teaches limitations of the claim in column 13, lines 7-12

Regarding claim 62, Mitchell teaches a wireless mobile phone comprising:
a transceiver to send and receive signals (Fig. 5, receiver 527 and transmitter 523);

a body casing having a front surface and side surface (FIG. 1);

a first button disposed on said side surface of said body casing (FIG. 2, buttons 124,128,126);

a second button disposed on said side surface of said body casing adjacent to the said first button (FIG. 2, buttons 124,128,126).

It should be noticed that, Mitchell fails to teach the feature of

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means coupled to first and second buttons and to the transceiver to facilitate entry of alphanumeric data or phrase with one or more words in code representations of a variable length coding scheme, using said first and second buttons, the variable length coding scheme including a first and a second code representation having a first and second code length representing a phrase and a vowel, respectively, and the first code length being shorter than the second length.

However, Anderson teaches such limitations in FIG. 9, Digital Signal Processor 948 providing digital logic support for Morse Code Keys 956; and column 20, line 65-column 21, line 2 (Morse code is used for coding messages having phrases comprising words, vowels and numbers having different lengths. In International Morse coding scheme, number of coding elements used for the word "te" is lower than vowel "o"),

It should be noticed that, Mitchell and Anderson, in combination, fails to teach the feature of transmission of said alphanumeric data using said transceiver. However, Keshavachar teaches such limitations in column 4, lines 6-20.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of feature of transmission of said alphanumeric data using said transceiver, as taught by Keshavachar, in view of Mitchell and Anderson in for use by verbally impaired users.

Regarding claim 63, Mitchell teaches a wireless mobile phone comprising:
a transceiver to send and receive signals (Fig. 5, receiver 527 and transmitter 523);
a body casing having a front surface and side surface (FIG. 1);

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a first button disposed on said side surface of said body casing (FIG. 2, buttons 124,128,126);

a second button disposed on said side surface of said body casing adjacent to the said first button (FIG. 2, buttons 124,128,126).

It should be noticed that, Mitchell fails to teach the feature of

a micro-controller and associated memory , including programming instructions stored in said memory, coupled to first and second buttons and to the transceiver to facilitate entry of alphanumeric data or phrase with one or more words in code representations of a variable length coding scheme, using said first and second buttons, the variable length coding scheme including a first and a second code representation having a first and second code length representing a phrase and a vowel, respectively, and the first code length being shorter than the second length.

However, Anderson teaches such limitations in FIG. 9, Digital Signal Processor 948 inherently including memory and program instruction for operations, providing digital logic support for Morse Code Keys 956; and column 20, line 65-column 21, line 2 (Morse code is used for coding messages having phrases comprising words, vowels and numbers having different lengths. In International Morse coding scheme, number of coding elements used for the word "te" is lower than vowel "o"),

It should be noticed that, Mitchell and Anderson, in combination, fails to teach the feature of transmission of said alphanumeric data using said transceiver. However, Keshavachar teaches such limitations in column 4, lines 6-20.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of feature of transmission of said alphanumeric data using said transceiver, as taught by Keshavachar, in view of Mitchell and Anderson in for use by verbally impaired users.

Allowable Subject Matter

11. Claim 3, and 49 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. Claim 33-36, and 39 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai N. Vu whose telephone number is 571-272-7928. The examiner can normally be reached on 9:00AM-7:00PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Thai N. Vu
Examiner
Art Unit 2687


6/12/05
LESTER G. KINCAID
PRIMARY EXAMINER